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NORTHERN GOSHAWK MONITORING
BEAVERHEAD-DEERLODGE NATIONAL FOREST
DILLON RANGER DISTRICT-WISDOM DISTRICT-
WISE RIVER DISTRICT
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A summary of northern goshawk research aimed at , 1) monitoring the activity status of historical goshawk territories, 2) inventorying the habitat chartacteristics of nesting areas, and 3) color banding the adults and fledglings. This research was carried out by Jack Kirkley, Professor of Biology, Western Montana College of The University of Montana in collaboration with Chuck Bowey, Dillon District Biologist, USDA Forest Service and Michele Grzenda, seasonal field technician / volunteer intern. This study was funded, in part, by the Dillon District of the USDA Forest Service.

Report submitted by

Jack Kirkley

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OVERVIEW

This report provides a summary of field work activities involving research on northern goshawks during the summer of 1996. The goshawk field sites are located on the Dillon, Wisdom and Wise River Districts of the Beaverhead-Deerlodge National Forest. Most of the field sites discussed in this report are the historical goshawk nesting territories described in the report of Patty Lemke, who surveyed and inventoried the habitat characteristics of previously known goshawk nesting areas during the summer of 1994. Thus, one can find more detailed descriptions of the specific nest site locations and nesting habitat characteristics in her report.

In the summer of 1995, the author, Jack Kirkley, revisited all but 2 of the goshawk territories initially described by Lemke. These sites were visited at least once, to try to determine if the territories were occupied and to check the breeding status at any active nests. In 1995, one breeding female goshawk was color banded and a standard USFWS band was also placed on her other leg as well as on the legs of her two nestlings. Where possible, a brief history of each previously known site will be included in the nest area account. These "History" sections will include comments on Kirkley's observations of goshawk activity or the lack thereof in 1995, as well as information gleaned from Lemke's report and a summary prepared by Stacy Courville, Dillon District Biologist, in 1993.

This report summarizes the observations made at goshawk nest sites visited during 28 days of field work, mostly within the months of June, July and August of 1996. For most historical sites, Kirkley made the initial visit in early June, and then Grzenda and Kirkley revisited each site once more in mid July through early August to listen for fledgling vocalizations and to recheck the areas for other nest sites. This report also briefly reviews the observations made at five additional goshawk territories examined by us for the first time in 1996, three of which were newly discovered by Grzenda on National Forest land, another which was discovered by Kirkley on land administered by Red Rock Lakes National Wildlife Refuge, and the fifth was a traditional nesting area located on Paul Olsen's private home site which lies immediately adjacent to the National Forest.

FIELD RESEARCH AT NORTHERN GOSHAWK NESTING AREAS - SUMMER 1996

1) DORY CREEK - No goshawk activity obs. in 1996. A Great Grey Owl nested.

he Dory Creek nest area which lies immediately south of the Maverick Mountain Ski Area was sited 4 times in 1996, in addition to one unsuccessful attempt to visit the site on May 5. That first attempt to visit was not successful because of the deep snow pack which remained throughout the forested areas adjacent to Dory Creek. The June 1 visit yielded no observations of goshawk activity at any of the 4 existing nest sites and no responses to broadcasted calls. A Great Grey Owl was observed sitting (incubating or brooding) on the 1994 goshawk nest. Visits on June 13 and 23 also revealed no goshawks, and only a single nestling great grey owlet tended by one adult. The final visit, with Grzenda, on July 27 revealed no owls in the nest vicinity and no goshawk vocalizations heard after an extended period in the nesting area, finalized by broadcasting the calls.

History: This is the second consecutive year that no active nest has been found in this area. Some fresh nest lining was seen in one nest in 1995, but no active nest was found. Active nests with successfully fledged young were documented in both 1993 and 1994 when these birds were studied by Kirkley and his students and coworkers in the Raptor Ecology course sponsored by the School for Field Studies.

2) BUCKHORN CREEK - Nest fledged 3 young. Color-banded female returned.

The Buckhorn Creek (Lemke calls Willow Creek) nest was active again for the third year in a row. In 1996, the active nest was the one used in 1994, when the nest was originally discovered. The 1995 active nest site is still in good repair. On June 3 an incubating adult was seen on the nest and was not flushed. On June 16 the visit yielded a brief view of the heads of very young downy nestlings d confirmed that the attending female still had the colored and aluminum bands that had been aced on her in this territory in 1995. On July 17, three fledglings were observed in the trees adjacent to the nest area with an agressive adult female attending. Kirkley recorded the amount of vocalization behavior for two extensive listening periods late in the afternoon of July 22 and on the morning of July 23. On August 2, Grzenda and Kirkley completed nest habitat inventory work on the 1995 nest site and later observed 2 of the fledglings nearer to the creek and north of the 1996 active nest.

History: 1994-first discovered active in north nest; 1995-active with two fledged young from south nest.

3) WOODY MOUNTAIN - Birds vocalized, one adult seen, but no active nest found.

On June 6 the initial visit resulted in hearing 2 simultaneous vocal responses to the broadcast call coming from the west and south of the last clearcut on the road west of the known nest sites. One vocalizing adult was observed west of the clearcut, but the other was not seen. The nest near the road is disintegrating and in poor condition, whereas the alternate site south of the second clearcut appeared to be in very good condition, and had a fresh goshawk secondary feather beneath it. On July 24, Grzenda and Kirkley revisited the site, but received no response to broadcast calls.

History: A forest service report from Stacy Courville indicated a nest was active in 1992. The 1993 observations were similar to 1996, because in 1993 a vocalizing bird was observed in the same ea west of the last clearcut, but no active nest (except one alternate nest site) was found despite n extensive SFS group search. The nest near the road was active in 1994 and the adult female was banded and instrumented with a tail mounted transmitter that year. 1995-no active nest was located and no birds were seen or heard.

4) SAGINAW - No goshawk activity observed.
On June 7 the lone nest was visited and no response to the broadcast was heard. On July 27, Grzenda and Kirkley rechecked the site and again failed to receive any response.

History: Lemke's report lists this nest as "active" in 1994. In 1995, this nest was used unsuccessfully by a Great Grey Owl, based on measurements of an addled egg Kirkley collected from the nest , as well as the Great Grey Owl feathers lining the nest. No goshawk activity was found in 1995.

5) MINER CREEK - No goshawk activity observed.
On both June 7 and July 27 both nesting areas yielded no responses to the broadcast calls.

History: According to Lemke's report, the western most nest was active in 1992, and the nest further east was active in 1993. The 1992 active nest had totally fallen from the tree by 1995 and remains absent in 1996. The 1993 active nest remains in fair condition but was not used in 1995 either. Thus, there has been no observed goshawk activity for the past 3 years; 1994, 1995 and 1996.

6) SEYMOUR - No goshawk activity observed.
On both June 8 and July 21 Kirkley observed no goshawk activity and received no responses to broadcast calls. The lone nest is still in fair condition and no other nests were found in the area.

History: Lemke reported that the nest had been active in 1993 but was not active in 1994 when she conducted the nest habitat inventory of the site. In 1995, Kirkley obtained a vocal response and sighted the approach of one adult goshawk on July 15, but failed to get any response on July 26. Thus, there has been no observed goshawk activity for the past 3 years; 1994, 1995 and 1996.

7) ISAAC MEADOWS - Active nest fledged 2 young. Adult male color banded.
On June 9 an adult was seen standing on the nest, but was not flushed. On June 23 the adlut male was trapped and color banded, whereas the female ignored the owl decoy and proceeded to feed the two young on the nest. On July 18, the nest was visited by Chuck Bowey, Grzenda and Kirkley and 2 fledglings were flushed from trees east of the nest site. On July 22 and 23, Grzenda recorded the amount of vocalization behavior at this nest during a period of 12 hours.

History: Lemke indicates this nest was active in 1994 when she conducted habitat surveys. Kirkley did not check this site in 1995, but believes that it was confirmed by Forest Service employee, Carrie Rogers to have no activity in that year.

8) MAYBEE MEADOWS - No goshawk activity observed.
On both June 9 and August 1 these two delapidated nests were checked and no goshawk activity was recorded after listening and broadcasting calls.

History: Lemke reported that the nest just off the east side of the road was active in 1992 and the nest down hill to the west of the road was active in 1993, but that neither nest was active in 1994. Kirkley did not visit this site in 1995, but believes it was confirmed to be inactive by Carrie Rogers

9) MARTIN MINE - No goshawk activity observed.

n both June 10 and July 30 this nest was confirmed to be inactive and no vocal reponses were ceived from broadcasts.

History: Lemke indicates that this nest was discovered as an active nest in 1993, but was inactive in 1994. Kirkley observed no activity at this site in 1995. Thus, it was inactive in 1994, 1995 and 1996.

10) LILY LAKE - No goshawk activity at nests, but FS personnel obs. birds in area.

Kirkley did not check this nest site early in the summer, but Forest Service employee, Paul Olsen, observed adult goshawks active in the area above Lily Lake where trail rerouting was taking place. On July 30, Grzenda and Kirkley checked the 2 nest sites and observed no goshawk activity.

History: Lemke discovered an active nest (agressively defended) near the inlet of the lake in 1994. She indicates that the other nest, further uphill to the north, was an active nest in 1993. Kirkley found no activity at either site in 1995.

11) SOUTH FORK DOOLITTLE - No goshawk activity at either nest.

On June 10 and August 1 these two nests, both in fairly good condition, were visited and no activity was observed.

History: Lemke's report indicates that the upper nest site was active in 1992 and the nest site further own the ravine was active in 1993, but that there was no activity in 1994. Kirkley observed no oshawk activity in 1995. Thus, these nests have been unoccupied in 1994, 1995 and 1996.

12) McCORMICK CREEK - No goshawk activity.

On June 10 and August 1 the old nest site was visited and no activity was observed. The nest has totally fallen from the nest tree as was the case in 1995.

History: Lemke calls this nest site "McCormick Alternate 1992", but Courville's report indicates that an active nest was known in this area in 1992. Apparently, there was no active nest found in 1993 or 1994. Kirkley observed no activity in 1995. Thus, this site has had no known activity since 1992.

13) TITAN GULCH - No goshawk activity.

On both June 12 and July 28 these 5 nest sites were visited and no goshawk activity was observed.

History: Lemke reported the active nest of 1989 was occupied by a Cooper's Hawk in 1994 when she surveyed the site and found no goshawk activity in the area. Courville indicated 2 nests were found in 1990 but that no sites were active in 1992. Lemke also lists a 1993 active goshawk nest further west on the same hillside. Two other alternate nest sites occur on this same slope, one below the 1989 active nest site and one above the 1993 active nest site. By traveling about 0.7 mi. further (south) up the same logging road, Lemke lists another alternate nest site (1989 Alt.) bearing marker as a wildlife tree. In 1995, Kirkley observed no goshawk activity at any of these five sites. hus, no goshawk activity has been documented in 1994, 1995 or 1996.

14) KNOBBY PARK - No goshawk activity.
On June 12, Kirkley unsuccessfully attempted to find the nest tree in the nesting area which had been extensively logged the previous fall. He recorded no goshawk activity. On July 28, Grzenda and Kirkley confirmed (by triangulating from reminant fragments of the hip chain string used by Lemke for her north and east transects) that the old nest tree had been cut and the stump had been bulldozed to make way for the logging road. Again, no goshawk activity was observed.

History: Lemke recorded this nest site as the "1992 alternate", and Courville indicated that the nest was found in 1992 but not active in 1992. Apparently, no active nests had been found in 1993 or 1994, either. Lemke mentlioned (perceptively) that her directions to the nest site would be irrelevant if timber harvest occurs. . In 1995, Kirkley visited the nest tree on July 16 and observed no activity in the area (except a large black bear!). At that time, Kirkley noted that the area had been extensively flagged prior to timber harvest, and he communicated his concerns to Wise River District Ranger, Ed Levert, shortly after visiting the site in July 1995. Mr Levert indicated to Kirkley that he would check with the person doing the harvest to ensure the nest area would not be destroyed. Apparently this consultation and modification did not take place, and the nest area was harvested in the fall of 1995.

15) PAUL OLSEN'S - Active nest with 3 fledglings.
On August 3, Grzenda and Kirkley completed a habitat inventory of these 4 nest sites. Only 2 of the 3 fledglings were present in the nesting area, and no adults were observed, although a couple of loud vocalization bouts seemed to indicate prey deliveries were occurring.

History: Courville indicated that Olsen found goshawk activity in 1991 and that there was an acti nest in 1992. Paul Olsen indicated that the active nest failed in the wet, cold summer of 1993 but nesting was successful in both 1994 and 1995, and now again in 1996. Olsen said the adults initially were aggressive towar him as he began building his home near their nesting area, but later the birds became accustomed to his presence and no longer acted aggressively toward him.

16) EUNICE CREEK - Active nest with 2 fledglings. Color banded adult & fledgling.
On August 4, Grzenda found fledglings and was attacked by an adult goshawk. On August 5, Kirkley and Grzenda returned to locate the nest site, and also successfully trapped and color banded one adult male and one male fledgling. On August 7, Grzenda and Kirkley completed the habitat inventory for this site. S½ SW¼ Sec 29 T 8 S, R 15 W

History: No previous nests had been found in this area, prior to this year.

17) HIDDEN CREEK - Active nest with 3 fledglings. Color banded one fledgling.
On approximately August 11 Grzenda heard vocalizations and observed fledglings in this area. On August 21, Kirkley, Grzenda and Chad Cyrus located the active nest site and observed 3 fledglings in the general vicinity. The nest habitat inventory was completed and one male fledgling was captured and color banded.

History: This area has no previous history of an active goshawk nest being located.

18) TAFT'S CENTENNIAL RANCH- New area with 5 nest sites, but no activity.

n August 10, Kirkley discovered an area on Red Rock Lakes NWR land southwest of John and Melody Taft's summer home which had 5 nest sites in close proximity to one another. On August 31 and September 1 Grzenda and Kirkley completed habit inventories of these nest sites.

History: The Taft's have seen goshawk activity near their summer home for many years, but never knew exactly where the nests were located.

19) HOPPS CREEK - New nest site. Unknown activity.

In early September, Grzenda discovered this nest site while accompanying a friend bow hunting. Grzenda prepared a description of the directions to find the nest site.

History: There is no previous history of goshawk nesting activity in this area.